



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,968	07/10/2001	William G. Sample	H0001393	9229

128 7590 03/01/2004

HONEYWELL INTERNATIONAL INC.  
101 COLUMBIA ROAD  
P O BOX 2245  
MORRISTOWN, NJ 07962-2245

EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT PAPER NUMBER

2686

DATE MAILED: 03/01/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/902,968

Applicant(s)

SAMPLE

Examiner

Joy K Contee

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 32-35 is/are rejected.
- 7) ☒ Claim(s) 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7, 10, 11, 22-25 and 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of the aforementioned claims contain the limitation "portion of...frequency information". It is not clear from the claims as to what the "portion" of radio frequency information refers to. This portion of the claims has not been considered on the merits.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-30 and 32-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Briffe et al. (Briffe), U.S. Patent No. 6,038,498.

Regarding claim 1, Briffe discloses a device, comprising: a database of radio frequency information (i.e., reads on instrument landing system- ILS or microwave

landing system- MLS frequency information) stored as a function of radio frequency (col. 5, lines 34-41 and col. 10, lines 57-62); and a circuit (i.e., reads on module in modular avionics units-MAU containing a processor functioning as a flight management system computer) coupled to the database and operating one or more algorithms (i.e., approaches and inherently software programs) for accessing the database as a function of an input radio frequency signal and generating a display signal as a function of an input radio frequency signal (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 2, Briffe discloses the device of claim 1 wherein: the circuit is further structured to receive a position signal (i.e., reads on differential GPS-DGPS or GPS) (col. 6, lines 16-21 and lines 45-64; and the one or more algorithms include one or more algorithms for accessing the database as a function of both the input radio frequency signal (i.e., reads on ILS or MLS) and a position signal (GPS or DGPS) and generating a display signal as a function of an input radio frequency signal and a position signal (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27)

Regarding claim 3, Briffe discloses the device of claim 2, further comprising a display coupled to the circuit, the display structured to receive the display signal and display the radio frequency information (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 4, Briffe discloses the device of claim 2 wherein the circuit (i.e., MAU) is a processor (col. 5, lines 25-33).

Art Unit: 2686

Regarding claim 5, Briffe discloses an aircraft frequency identifier device, comprising: a database of stored radio frequency information (col. 5, lines 34-41 and col. 10, lines 57-62) ; and a processor ( i.e., reads on module in modular avionics units-MAU containing a processor functioning as a flight management system computer) coupled to the database and operating one or more algorithms (i.e., "approaches" and inherently software programs) for accessing the database as a function of an input radio frequency signal and generating a display signal as a function of an input radio frequency signal (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27)

Regarding claim 6, Briffe discloses the device of claim 5 wherein the one or more algorithms (i.e., reads on approaches using navigation aids GPS, ILS or MLS for example) operated by the processor (MAU) access the database as a function of an input radio frequency (i.e., radio frequency is either manually entered or automatically entered) signal and a position signal (i.e., input automatically by GPS signals) (col. 9, lines 15-20 and col. 10, lines 57-62).

Regarding claim 7, in light of the rejection under 35 USC 112, second paragraph, Briffe discloses the device of claim 6 wherein the one or more algorithms operated by the processor retrieve from the database {a portion of} the radio frequency information corresponding to an input radio frequency signal and inherently a position signal (col. 9, lines 15-20).

Regarding claim 8, Briffe discloses the device of claim 7, further comprising a display coupled to the processor for receiving the display signal and generating a display as a function thereof (col. 11, lines 25-27).

Regarding claim 9, Briffe discloses the device of claim 8, further comprising a control device structured to input a radio frequency to one of the processor and the display (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 10, in light of the rejection under 35 USC 112, second paragraph, Briffe discloses a device, comprising:

a database of radio frequency information stored as a function of radio frequency and position (col. 10, lines 27-62); and

a processor (MAU) having a first input structured to receive a signal indicative of an input radio frequency (i.e., ILS or MLS information) and a second input structured to receive a signal indicative of position (i.e., GPS or DGPS information), the processor coupled to the database and operating one or more algorithms for retrieving {a portion of } the radio frequency information as a function of a signal indicative of an input radio frequency received on the first input and a signal indicative of position received on the second input (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 11, in light of the rejection under 35 USC 112, second paragraph, Briffe discloses the device of claim 10 wherein the processor further operates one or more algorithms for generating a display signal indicative of {the portion

Art Unit: 2686

of} the retrieved radio frequency information (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 12, Briffe discloses the device of claim 11, further comprising a display coupled to receive the display signal (col. 6, line 63 to col. 7, line 4).

Regarding claim 13, Briffe discloses the device of claim 11, further comprising a control device (i.e., keyboard or other user control) coupled to the first input of the processor and structured to input a radio frequency to the processor (i.e., inherently the flight deck's MAU is coupled to the pedestal) (col. 4, line 48 to col. 5, line 4 and col. 6, line 66 to col. 7, line 4).

Regarding claim 14, Briffe discloses the device of claim 11, further comprising a control device coupled to the first input of the processor and structured to input a radio frequency to the display (col. 4, line 48 to col. 5, line 4 and col. 6, line 66 to col. 7, line 4).

Regarding claim 15, Briffe discloses the device of claim 11 wherein the second input (i.e., GPS navigational sensor in instrument panel) of the processor is structured to receive an output signal of a global positioning system that is indicative of position (col. 6, lines 45-64).

Regarding claim 16, Briffe discloses an aircraft frequency identifier, comprising:  
a means for inherently storing radio frequency information (i.e., since transceivers can be tuned by "pointing and clicking" on frequency in a digital map, frequency information must be stored) (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27);

Art Unit: 2686

an accessing means (i.e., user control device, e.g., keyboard or tracking ball), coupled to the storing means, for accessing the stored radio frequency information as a function of an input radio frequency signal and a position signal (col. 4, line 48 to col. 4, line 4 and col. 6, line 65 to col. 7, line 4); and

an output signal generating means (i.e., data stored is displayed), coupled to the accessing means, for generating an output signal as a function of the accessed radio frequency information (col. 9, lines 12-27 and col. 11, lines 25-27).

Regarding claim 17, Briffe discloses the device of claim 16 wherein the means for storing radio frequency information includes means for storing the radio frequency information in a look-up table (i.e., reads on data base) (col. 10, lines 44-63).

Regarding claim 18, Briffe discloses the device of claim 17 wherein the accessing means includes a means for operating one or more algorithms (i.e., reads on ILS approach) for retrieving the radio frequency information from a look-up table (database) (col. 9, line 15-20 and col. 10, line 57-63).

Regarding claim 19, Briffe discloses the device of claim 16, further including receiving means (i.e. reads on processor MAU), coupled to the output signal generating means, for receiving the output signal (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 20, Briffe discloses the device of claim 19, further including displaying means, coupled to the output signal receiving means, for displaying the accessed radio frequency information (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).



Regarding claim 21, Briffe discloses the device of claim 16, further including signal inputting means, coupled to the output signal accessing means, for inputting a radio frequency signal (col.9,lines 12-20).

Regarding claim 22, in light of the rejection under 35 USC 112, second paragraph Briffe discloses a device, comprising:

database means for (i.e., since transceivers can be tuned by "pointing and clicking" on frequency in a digital map, frequency information must be stored) storing radio frequency information as a function of radio frequency and inherently a position (col. 9,lines 12-20);

and processor means for receiving a first signal indicative of an input radio frequency and a second signal indicative of position, the processor means coupled to the database means for retrieving {a portion of} the radio frequency information as a function of a first signal indicative of an input radio frequency and a second signal indicative of position (col. 4,line 48 to col. 4,line 4 and col. 6,line 65 to col. 7,line 4 and col. 8,lines 53-65 and col. 9,lines 12-20).

Regarding claim 23, in light of the rejection under 35 USC 112, second paragraph Briffe discloses the device of claim 22 wherein the processor means for retrieving {a portion of} the radio frequency information further includes processor means for operating one or more algorithms for retrieving a portion of the radio frequency information (col. 6,line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Art Unit: 2686

Regarding claim 24, in light of the rejection under 35 USC 112, second paragraph Briffe discloses the device of claim 23 wherein the processor means further includes signal generating means for generating a signal indicative of { the portion of} the radio frequency information retrieved by the processor means (col. 7, lines 1-4 and col. 11, lines 24-27).

Regarding claim 25, in light of the rejection under 35 USC 112, second paragraph Briffe discloses the device of claim 24, further comprising display means, coupled to the processor means, for receiving the signal indicative of {the portion of} the radio frequency information and displaying the {portion of} the radio frequency information (col. 6, line 45 to col. 7, line 4 or col. 9, lines 12-20 and col. 11, lines 25-27).

Regarding claim 26, Briffe discloses a method of identifying an aircraft frequency, comprising:

storing radio frequency information; accessing the stored radio frequency information as a function of an input radio frequency signal and a position signal; and generating an output signal as a function of the accessed radio frequency information (col. 9, lines 12-20 and col. 11, lines 24-27).

Regarding claim 27, Briffe discloses the method of claim 26 wherein the storing radio frequency information includes storing the radio frequency information in a look-up table (i.e., reads on database) (col. 10, lines 57-63).

Regarding claim 28, Briffe discloses the method of claim 27 wherein the accessing the stored radio frequency information includes operating one or more algorithms (i.e., reads on approaches to navigational aids, e.g., GPS and ILS) for

Art Unit: 2686

retrieving the radio frequency information from a look-up table (database) (col. 10,lines 57-63).

Regarding claim 29, Briffe discloses the method of claim 26, further including receiving the output signal the output signal and displaying the accessed radio frequency information (col. 11,lines 24-27).

Regarding claim 30, Briffe discloses the method of claim 26, further including inputting a radio frequency signal for use in the accessing the stored radio frequency information (col. 7,lines 1-4).

Regarding claim 32, in light of the rejection under 35 USC 112, second paragraph Briffe discloses a method of identifying an aircraft frequency, comprising:

storing radio frequency information in a database inherently as a function of radio frequency and position (col. 10,lines 57-60);

receiving in a processor a first signal indicative of an input radio frequency and a second signal indicative of position (col. 9,lines 15-20); and

retrieving from the database {a portion of} the radio frequency information inherently as a function of a first signal indicative of an input radio frequency and a second signal indicative of position (col. 9,lines 15-20).

Regarding claim 33, in light of the rejection under 35 USC 112, second paragraph Briffe discloses the method of claim 32 wherein the retrieving of {a portion of} the radio frequency information further includes operating one or more algorithms for retrieving {a portion} of the radio frequency information (col. 9,lines 15-20).

Art Unit: 2686

Regarding claim 34, in light of the rejection under 35 USC 112, second paragraph Briffe discloses the method of claim 33, further including generating a signal (i.e., displaying) indicative of {the portion of} the retrieved portion of the radio frequency information (col. 9, lines 13-20).

Regarding claim 35, in light of the rejection under 35 USC 112, second paragraph Briffe discloses the method of claim 34, receiving the signal indicative of the retrieved {portion of} the radio frequency information and displaying the retrieved {portion of the} radio frequency information (col. 9, lines 13-20).

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-3 of copending Application No. 09/902,963 ('963). Although the conflicting claims are not identical, they

are not patentably distinct from each other because claims 1-9 of the instant application encompass the scope of claims 1-3 of '963.

'963 claims a storing radio frequency identifiers and radio frequency information and a processor coupled to a database (see claims 1 and 2). The instant application claims stored radio frequency information and a circuit coupled to database (see claims 1 and 5). Radio frequency identifiers are analogous to radio frequency information, i.e., any identifier of a radio frequency (e.g., named frequency identifier, ILS for instrument landing system) encompasses frequency information. Further, a processor and a circuit are analogous.

Omission of element and its function in combination is obvious expedient if remaining elements perform same functions as before. In re KARLSON (CCPA) 136 USPQ 184 (1963).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Allowable Subject Matter***

7. Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: prior art of record fails to disclose in combination with the depending limitations, further including inputting a position signal for use in the accessing the stored radio frequency information.

**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fraughton et al., U.S. Patent No. 5,153,836 discloses a universal dynamic navigation system.

Smith et al., U.S. Patent No. 6,633,259, discloses a method and apparatus for improving utility of automatic dependent surveillance.

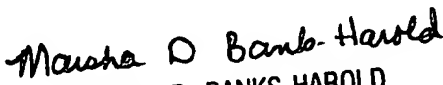
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on 5:30 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

  
Joy Contee

February 20, 2004

  
MARSHA D. BANKS-HAROLD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600